## Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

### **ENVIRONMENTAL ASSESSMENT**

For Routine Actions with Limited Environmental Impact

### Part I. Proposed Action Description

Applicant/Contact name and address: LOEHDING RANCH INC.

P.O. BOX 42

EKALAKA, MT 59324

1. Type of action: APPLICATION FOR BENEFICIAL WATER USE PERMIT

NO. 39E 30041611

Water source name: FOSTER DRAW

3. Location affected by project: NE¼ SE¼ SW¼ , SECTION 31, T1S, R58E, IN CARTER COUNTY.

4. Narrative summary of the proposed project, purpose, action to be taken, and benefits: This project is for surface water from Foster Draw for dike system irrigation of 94.3 acres. The application requests a total volume of 94.3 acre-feet (AF) to be applied from January 1<sup>st</sup> to December 31<sup>st</sup> inclusive each year. The requested water will be used to irrigate a grass/alfalfa pasture for haying or cattle grazing purposes. The period of use is being requested due to the infrequent occurrence of water flow down Foster Draw during spring and fall runoff and the possibility of isolated precipitation events. This source is supplied by runoff from the approximately 14,000 acre drainage area near the head waters of Buffalo Creek. The dike system is intended to be a minimal effort system due to the difficulty in accessing this location during periods of water availability. The seven dikes are located in S½ of Sec. 31, T1S, R58E, in Carter County. The place of use is within the same legal description in Carter County.

The DNRC will issue a provisional water use permit if all criteria for issuance under §§ 85-2-311, MCA are met.

5. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Montana Natural Heritage Program

Montana Historic Preservation Office

Montana Department of Fish Wildlife & Parks (MFWP)

Montana Department of Environmental Quality (MDEQ)

### Part II. Environmental Review

1. Environmental Impact Checklist:

# PHYSICAL ENVIRONMENT

### WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No significant impact.

Foster Draw is a tributary of Buffalo Creek and is not on the Montana Fish Wildlife and Parks list of chronically or periodically dewatered streams. There will be minimal impacts on the source from this proposed use, but those impacts are not expected to be significant.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No significant impact.

Foster Draw is not on the Montana Department of Environmental Quality's list of water quality impaired or threatened streams. This proposed irrigation use is expected to have no significant impact on water quality issues in the area.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No significant impact.

This application is requesting the use of surface water; therefore, no significant impacts to groundwater quality or quantity are expected.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No significant impact.

The diversion system for in this application consists of seven earthen dikes with a 15 inch drainpipe and plug for drainage. There is a two foot drop in elevation between dikes and they are spaced to provide adequate water to the 94.3 acres needing irrigation. The drain pipe for each dike is plugged for spring runoff and then unplugged within five days of thaw. The dikes are designed to accommodate one foot of water maximum. Water will flow into the middle of the dike and exit to the North, South or middle depending on the dikes orientation. The applicant notes this system is designed to run automatically due to the distance from home and difficult access during runoff periods.

### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: No significant impact.

The Montana Natural Heritage Program has identified two species of concern within this proposed project area: the Greater Sage-grouse (*Centrocercus urophasianus*), Ferruginous Hawk (*Buteo regalis*), It is not expected that this proposed project will adversely impact any of these species.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No significant impact.

No wetlands are claimed within the project area.

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No significant impact.

This project will increase the available feed to wildlife in the area and is expected to have no effects on fish due to the intermittent nature of the source.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No significant impact.

This project should not degrade soil quality or cause saline seep problems within the area. The irrigation will create water seepage in areas wider than the current stream channel, but it is not expected saline seep or other negative effects will occur as there is a noticeable amount of clay in these soils.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No significant impact.

There will be some soil disturbance during construction of this proposed project and there is a possibility for spread or establishment of noxious weeds. The landowner is responsible for controlling any establishment of noxious weeds as a result of disturbance.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No significant impact.

No deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this project is expected.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: No significant impact.

The State of Montana Historic Preservation Office (SHPO) did not identify any historic or archeological sites of record in the proposed project area. However, SHPO feels the lack of previous inventory in this area recommends a cultural resource inventory. The lack of inventory suggests the potential for cultural disturbance. SHPO notes a study in this area could determine the existence and impacts on potential sites.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No significant impact.

There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

### **HUMAN ENVIRONMENT**

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: No significant impact.

This proposed use is not inconsistent with any locally adopted environmental plans and goals for Carter County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No significant impact.

There should be no significant impacts on recreational or wilderness activities from this proposed use.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

Determination: No significant impact.

There should be no significant impact on human health from this proposed use.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No \_**X**\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.

- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) <u>Demands for government services</u>? **No significant impact.**
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) <u>Transportation</u>? No significant impact.
- (j) <u>Safety?</u> No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.
- **2.** Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No significant impact.

Cumulative Impacts: No significant impact.

- 3. Describe any mitigation/stipulation measures: The applicant states; due to construction of the dike system should a water user make call, the pipes in the dikes can be opened to allow water to flow through and into Buffalo Creek.
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The applicant could drill wells to supply the amount of water needed for the proposed uses. However, this would be very costly and it is questionable whether the water would be available in the amount requested.

The "no action" alternative would mean the Loehding Ranch Inc. could not have irrigation water for their property and therefore not be able to raise and feed their cattle.

#### PART III. Conclusion

- 1. Preferred Alternative: The preferred alternative would be to allow use of water, from Foster Draw with the condition that there will be no adverse impacts to any senior water rights.
- 2. Comments and Responses: None to report.
- **3.** Finding:

Yes\_\_\_ No\_X\_ Based on the significance criteria evaluated in this EA, is an EIS required? No EIS is required.

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified, therefore no EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Mark V Corrao

Title: Water Resources Specialist

Date: September 26, 2008